

Abstract

Process for fabrication of a ferrocapacitor

A process for fabricating a ferrocapacitor comprises etching a layer of amorphous PZT formed over a layer having a low concentration of nucleation centres for PZT crystallisation. The etching step forms individual PZT elements. The side surfaces of the PZT elements are then coated with a layer of a material which promotes crystallisation of the PZT, such as one having a high concentration of PZT crystallisation centres (e.g. TiO_2), and a PZT annealing step is carried out. The result is that the PZT has a high degree of crystallisation, with grain boundaries extending substantially horizontally through the PZT elements.

[Fig. 1(b)]